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CONDITIONS AND EXAMINATIONS: WALLOWA NATIONAL FOREST

W.D. EDMONSTON DECEMBER 6, 1916

STANFORD UNITERSITY GALIFORNIA The Southern Wallowa.

FOREST INSECT EAST MATURY.

(Minam National Forest)

Examinations of portions of this Forest and Adjacent forested areas was for the purpose of ascertaining in a general way the relative amount of 1911-12 infestation to the 1910-11 infestation.

In 1907 Mr. H. E. Burke found large areas of lodgepole pine infested and dying in the vicinity of Wallowa and Joseph Ore.

Scattering infestation at that time was also observed in the yellow pine type.

In the Spring of 1910 the writer made an extended reconnaissance along the borders of the Forest in the vicinity of Medical Springs, and south east to Pine Valley.

Extensive infestation was noted in the lodgepole pine and clumps of infested yellow pine and scattering infested trees werenoted.

Other examinations were made in this forest during the summer and fall by Mr. Burke and the writer. Conditions were found to be much the same as those formerly observed and reported. There was no decrease in the infestation. Counts made in the yellow pine showed that there was if anything a slight increase on the yellow pine areas.

In the Spring of 1911 areas near Medical Springs were examined by Dr. A.D. Hopkins, Mr. Burke and the writer, no reduction in the infestation was noted, clumps and scattering trees were observed to be infested.

In July 1911 examinations were made by agents of this Bureau at Medical Springs and South East to Sparta, Ore. The result of this examination brought out the following facts; no reduction in the number of infested trees over previous years was noted. On areas near the large burn in the lodgepole which occurred near Medical Springs, in August 1910, a slight reduction was noticed, but it appeared to have had little effect on areas beyond a mile from the outer edge of the burn.

It was found that while monticolae attack on the trees near the burn were fewer brevicomis and the flat-head borers were stronger that is to say more trees were found showing attack by those two species than had been observed heretofore in this particular locality. On areas at a reasonable distance from the burn, no falling off in the infestation by monticolae was noticeable. A record was kept of the number of 1910-11 infested yellow pine on an area on Big Creek the first stream south of Medical springs. Part of the area was on the Forest and part off; 200 merchantable yellow pine practically in one clump were infested by D. monticolae in 1910, in July 1911 the broads were emerging or had nearly all done so, some 1911 infestation was recorded. When the writer examined this area in 1912 the same number of about the same diameter were found infested. There was apparently no increase mather was there any decrease. In the country south and east as far as Pine Valley from 12 to 20 trees per section were noted and as a rule D. monticolae was primary. When this area was again examined in June 1912 there did not appear to be any reduction in the number of infested trees per section and clumps of infested trees were noted as before.

From June 10 to June 16, 1912, the writer accompanied by Agent Hofer, made a very thorough examination of the areas both at Medical Springs and between there and Pine Valley. After two days spent in examining the areas adjacent to the lodgepole burn and the yellow pine areas on Big Creek, where conditions were found to be quite similar to those of 1910 and 1911 with the exceptions already stated where trees were found infested by <u>D. brevicomis</u>. One clump of large yellow pine 28 in number was located on the Forest close to the Rangers Station, quite a number of those trees were badly scorched by fire, the 1910 fire having passed through this belt of pine, but did little damage except in patches where clumps of insect killed trees both standing and down had held the fire for some length of time with the result that it burned a number of near by trees and badly scorched others; had the ground been free from bug killed timber little damage rould have resulted.

There was some evidence that some of the trees mentioned as infested by brevicomis might also have been infested for some distance in the top by

monticolae, in any case they were infested and would die.

On Big Creek no brevicomis work was noted except in a very few trees it was all infestation by monticolas.

The writer and Agent Hofer walked from Medical Springs to Pine and from thereto Halfway and Newbridge in the Eagle Valley.

This was a heavily timbered region all the way and side trips were made wherever possible.

The distance was 40 miles and four days to make the distance which gave ample time for examinations. The writer formed the impression that there was little difference between the years 1910, 1911 and 1912 in relation to the average number of trees dying each year.

Some counts were made on little Eagle Cr., also on Paddy Cr., but no great increase was recorded, on some areas more red-tops were noted, on others more fading trees were noted.

The lodgepole areas observed appeared to be less red which would indicate a higher percentage of dead timber. Some patches that were surrounded by yellow pine which we examined showed only about 6% green the balance all dead. More scattering infestation was noted in the yellow pine fewer clumps seemed to be infested. The writer is inclined to think, however, that there is an increase in the number of single trees infested and just about the same number as formerly in bunches.

There is not the slighest indication of any decrease in the average number of infested trees per section over the whole area.

Examinations were made in the vicinity of Joseph Ore., during the latter part of September. It was noticed that the large areas of lodgepole on the steep canyon slopes all along the range had now assumed the old dead appearance few red topped trees being observed.

Closer inspection on the high hills surrounding Wallowa Lake showed that there was still about 5% infestation and a very heavy percent of infestation in the Whitebark pine, very much more than had been observed in 1910 when Mr. Burke and the writer made an examination on the same ground. The writer does not believe there is any decreased every thing pointed to increased infestation in the

white bark pine.

Southern Wallows.

In this Forest everything points to a continuation of the infestation for some years to come, there are still large bodies of lodgepole and white bark pine that are only partially infested and in these the infestation may continue for amply years to come.

The writer had intended to touch on the subject of the insects but as this report has already covered a sufficiently large field covering the main points directly relating to that side of the work with which the writer is more thoroughly familiar, he deems it best at this time to confine the report to the data requested in the written instructions.

Very respectfully

W.D.Edmonston.

In Charge of Station 6.

December 6/16.

WALLOWA NATIONAL FOREST.

The first report of insect depredations in what is now the Wallowa Forest was in January 19)7 - came from the Forest Service, with a request for an investigation. Preliminary recommendations for the adoption of control measures were made February 190%:

Investigations were made by Feidl, Agent H.E. Burke of the Bureau of Entomology, Branch of Forest Insect Investigations, in August 1907, who reported very extensive depredations in the lodgepole pine 20 miles from Joseph on the Big Sheep Creek, stating that 75 to 90% of the timber had been killed within recent years over an area of some 100,000 acres, and that the trouble appeared to be spreading rapidly, also affecting the yellow pine. In November 1907 the Forest Supervisor reported that after a thorough examination of the timber of the forest, he concluded that the timber was affected over the entire forest and that in some places as much as 75% was dead. Nothing further was heard from this Forest.

In December the Forest Service reported that all possible action seems to have been taken in the Forest in the issuing of orders to dispose of as much insect infested timber as possible.

In April 1909 the same information was supplied from the Forest Service with the statement that it seemed to end the matter and that nothing more could be done until favorable conditions for control work developed.

In November 1909 insect depredations on the yellow pine in the southeast corner of the Forest was reported to the Forest Service by the Acting District' Forester.

In January 1910 samage to the timber on private lands adjoining the Wallowa on the south was reported. In the same month damage was reported from private lands in and west of the Forest.

Mar/10

WALLOWA NATIONAL FOREST.

Preliminary summary March 1910 (copy)

1910 - Lodgepole areas examined by Edmonston and Harvey. Report made by Harvey, June, 1910.